

	Term 1	Term 2	Term 3
Unit of work	Mechanisms - Sliders and Levers	Food – Preparing fruit and vegetables	Structures - Freestanding structures
Link to Programme of study	<p>Design design purposeful, functional, appealing products for themselves and other users based on design criteria generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p> <p>Make select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</p> <p>Evaluate explore and evaluate a range of existing products evaluate their ideas and products against design criteria</p> <p>Technical knowledge build structures, exploring how they can be made stronger, stiffer and more stable explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products</p> <p>Cooking and nutrition use the basic principles of a healthy and varied diet to prepare dishes understand where food comes from</p>		
Composite knowledge	<p>What is a slider?</p> <p>What is a lever?</p> <p>Which part of the mechanism is a pivot?</p>	<p>How many different types of fruit are available?</p> <p>What vocab can you use to describe the smell, taste and texture of different fruit?</p> <p>Why do we need fruit and veg to have a balanced diet?</p> <p>How do we prepare food in a safe way?</p>	<p>What is a freestanding structure?</p> <p>How can we stop freestanding structures from falling over?</p> <p>How can we make a structure stronger, stiffer and more stable?</p>
Intentional knowledge they need to understand (Component knowledge)	<p>Understand that different mechanisms produce different types of movement</p> <p>Describe how a slider moves</p> <p>Describe how a lever works</p> <p>Identify the pivot</p>	<p>Explain the importance of having fruit and vegetables as part of a balanced diet</p> <p>Recognise different types of fruit</p> <p>Demonstrate how to prepare food in a safe way</p>	<p>Recognise and describe what a freestanding structure is</p> <p>Observe and construct different methods to prevent a freestanding structure from falling over</p> <p>Demonstrate different techniques to make a structure stronger, stiffer and more stable</p>

Vocabulary	slider, lever, pivot, design, make, evaluate, user, purpose	slicing, peeling, cutting, squeezing, healthy diet, ingredients, planning, investigating	framework, weak, strong, metal, wood, plastic
Links to prior knowledge	Early experiences of working with paper and card to make simple flaps and hinges. Experience of simple cutting, shaping and joining skills using scissors, glue, paper fasteners and masking tape.	Experience of common fruit and vegetables, undertaking sensory activities i.e. appearance taste and smell. Experience of cutting soft fruit and vegetables using appropriate utensils.	Experience of using construction kits to build walls, towers and frameworks. Experience of using of basic tools e.g. scissors or hole punches with construction materials e.g. plastic, card. Experience of different methods of joining card and paper.
Cross-curricular links	Mathematics – describe position, direction and movement. Use appropriate standard and nonstandard measures. Art and design – use colour, pattern, line, shape.	Science – understand that plants have leaves, stems, roots, flowers and fruits; understand the importance of growing plants and how seasons affect growth. Writing – develop descriptive writing based on first-hand experience of tasting fruit and vegetables. Mathematics – carry out a simple survey to find out which are the favourite fruits/vegetables; construct and interpret the information in e.g. pictograms and bar graphs. Writing – instructions on how to use one of the utensils; how to prepare e.g. a fruit for eating. Science – talk about a balanced diet, different types of food and hygiene.	Mathematics – use appropriate standard and non-standard measures. Recognise and name common 2-D and 3-D shapes. Science – think about the properties of materials that make them suitable or unsuitable for particular purposes. Geography – use simple fieldwork and observational skills to study the geography of their school and its grounds and the key physical features of its surrounding environment.
Oracy & Outdoor Learning Links	Spoken language – participate in discussion about books and other products with moving parts, taking turns and listening to what others say. Ask relevant questions to extend their knowledge and understanding. Build technical and directional vocabulary.	Spoken language – children develop and use a sensory vocabulary, ask questions to check understanding; use the correct terminology for equipment and food processes.	Spoken language – participate in discussion about various structures, taking turns and listening to what others say. Ask relevant questions to extend their knowledge and understanding. Build technical vocabulary.